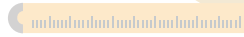


BIOHACK NOTES



HUMAN HEALTH AND DISEASE

- BASED ON ACTIVE RECALL AND SPACED REPETITION
- TARGET 360/360 IN NEET BIOLOGY & 100/100 IN BOARDS!



PARTH GOYAL





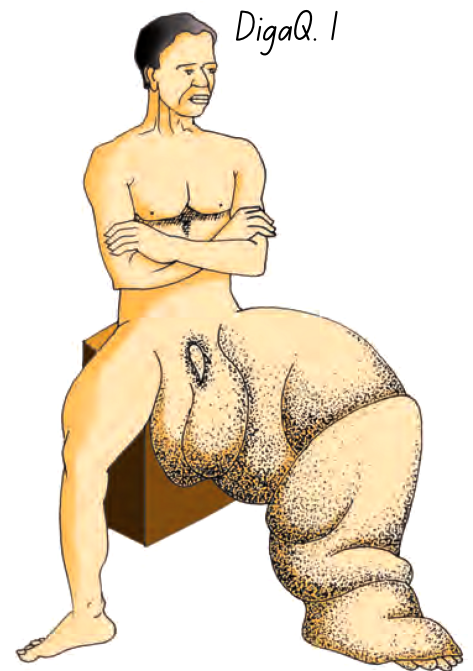
• INTRODUCTION

1. Father of medicine is -
2. Health was considered as a state where there is a balance of certain "_____".
3. This was asserted by _____ as well as _____
4. Person with black bile belong to hot/cold personality.
5. Blood circulation was discovered by - (NEET)
6. _____ disproved 'good humour' hypothesis.
7. Health is affected by - (3)
8. Define health.
9. Disease can be grouped into - (2)



• COMMON DISEASES IN HUMANS

10. Typhoid is caused by - (NEET)
11. These pathogens enter in small intestine through _____ and _____ contamination. (NEET)
12. Some common symptoms of typhoid is - (6)
13. Intestinal perforations and death may occur in typhoid. T/F
14. Typhoid is confirmed by _____ test.
15. _____ nicknamed _____ was a cook and spread typhoid through the food she prepared.
16. Pneumonia is caused by - (2) (NEET)
17. In pneumonia, the alveoli get filled with fluid leading to severe problems in respiration. T/F (NEET)
18. The alveoli get filled with fluid in pneumonia. T/F
19. Symptoms of pneumonia are - (4)
20. In severe cases lips and finger-nails may turn _____ to _____ in colour.
21. Dysentery, plague, diphtheria are bacterial/protozoal diseases. (NEET)
22. Plague, diphtheria are caused by -
23. Common cold is caused by - (NEET)
24. Rhino virus infects the nose, respiratory passage and the lungs. T/F (NEET)
25. Common cold lasts for ___-___ days.
26. Sore throat and hoarseness don't occur in common cold. T/F
27. Malignant malaria is caused by _____



28. _____ is the most serious malaria and can even be fatal. (NEET)
29. Name the 3 different types of plasmodium which cause malaria. (NEET)
30. Plasmodium enters the human body as _____ (infective form), through the bite of _____ mosquito. (NEET)
31. Its sexual stages are developed in _____
32. The parasite initially multiplies in _____ and then attack _____
33. RBC rupture cause release of a toxin substance called _____
34. _____ is responsible for the chill and high fever recurring every ____ to ____ days.
35. Where does fertilisation of gametocytes of plasmodium take place ?
36. Sporozoites are stored in _____ of mosquito.
37. Amoebiasis is caused by _____ in the small/large intestine. (NEET)
38. Amoebiasis is also called _____ and is cause by a bacteria/protozoa (NEET).
39. Symptoms of amoebiasis are - (4)
40. _____ act as mechanical carriers of amoebiasis.
41. Common round worm and filarial worm are _____ and _____ respectively.
42. Ascaris cause _____. Its symptoms are (5) (NEET)
43. Ascariasis spread by - (NEET)
44. The two kinds of Wuchereria are - (NEET)
45. They cause _____ also called _____ (NEET)
46. _____ organs are also affected in filariasis.
47. Wuchereria is transmitted through contaminated water and food. T/F
48. The filarial worms cause a fast/slowly developing chronic inflammation.
49. Genera of fungi responsible for ringworms are - (3)
50. _____ is the most common infectious disease in man.
51. Symptoms of ringworms is appearance of dry, scaly lesions at _____, _____, _____
52. These lesions are not accompanied by itching. T/F
53. Heat and moisture restrict the growth of these fungi. T/F
54. Ringworms are acquired from - ((4)
55. _____ fish feeds on mosquito larva.
56. Aedes mosquito is the vector of - (2)

DigaQ. 2



PARTH GOYAL



• IMMUNITY

57. Name the 4 types of barriers of innate immunity.

58. Full form of PMNL is -

59. Ex. of physical barriers - (2) (NEET)

60. Ex. of physiological barriers - (3) (NEET)

61. Ex. of cellular barriers - (4) (NEET)

62. Ex. of cytokine barrier - (1) (NEET)

63. Anamnestic response is name given to -

64. T-cells help B cells to produce antibodies. T/F (NEET)

65. Antibody is represented as _____

66. Name all the different types of antibodies present in humans. (5)

67. _____ mediates CMI. (NEET)

68. _____ is responsible for graft rejection.

69. The patient have to take _____ drugs all life after organ transplantation.

70. Ex. of natural passive and artificial passive immunity are - (NEET)

71. Colostrum have abundant IgA/IgG antibodies. (NEET)

72. The foetus doesn't receive antibodies from placenta. T/F

73. What is antitoxin?

74. In case of _____, quick immune response is required.

75. Hepatitis B vaccine is produced from _____

76. The antibody produced in allergy is _____ type. (NEET)

77. Allergy is due to the release of chemicals like _____ and _____ from _____ cells. (NEET)

78. The use of what 3 things reduce symptoms of allergy?

79. Ex. of autoimmune disease -(2) (NEET)

80. Primary lymphoid organs are - (2) (NEET)

81. Secondary lymphoid organs are - (5) (NEET)

82. _____ provides the sites for interaction of lymphocytes with the antigen

83. Thymus does not reduce in size with age. T/F (NEET)

84. T-lymphocyte mature in - (2)

85. Spleen is _____ shaped organ. (NEET)

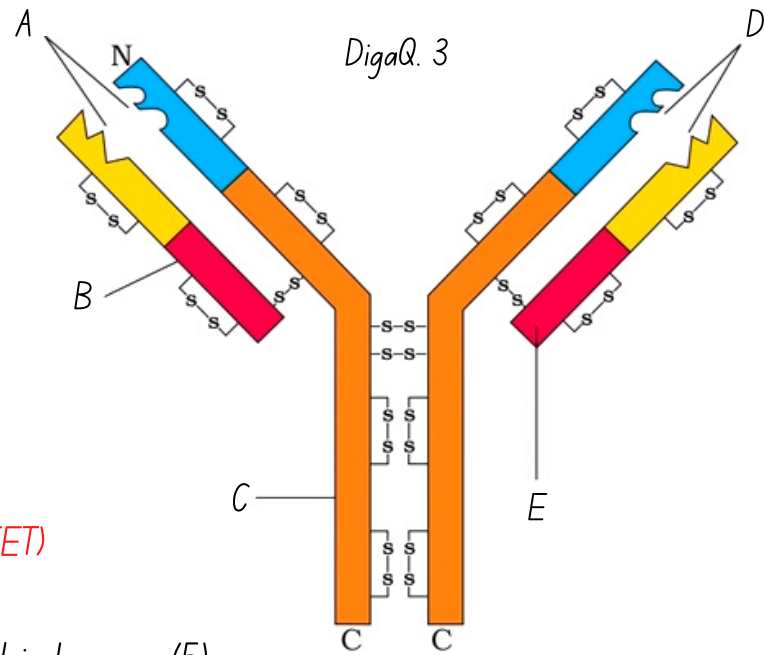
86. It mainly contains _____ and _____ (NEET)

87. It acts as a filter of blood. T/F

88. Spleen have large reservoir of _____ (NEET)

89. MALT full form -

90. MALT constitutes about ___ % of the lymphoid tissue.





• AIDS

91. AIDS full form - (NEET)

92. "-----" means a group of symptoms.

93. AIDS was first reported in year ----- and it has killed more than ----- million persons.

94. AIDS is caused by -----, which is a member of group of virus called ----- (NEET)

95. Transmission of HIV infection occur through - (4)

96. HIV spreads only through body fluids. T/F

97. HIV infected persons should be isolated from family and society. T/F

98. Time lag between infection and appearance of symptoms is usually -

99. HIV enters into macrophages and forms viral DNA. T/F (NEET)

100. ----- acts like a HIV factory.

101. HIV attack ----- lymphocytes.

102. Toxoplasma is caused by -

103. Mycobacterium is bacteria/fungi.

104. Diagnostic test for AIDS is - (NEET)

105. ELISA full form -

106. Treatment of AIDS with anti-retroviral drugs is only partially effective. T/F

107. NACO full form -



• CANCER

108. Normal cells show a property called ----- by virtue of which contact with other cells inhibits their uncontrolled growth. (NEET)

109. The 2 types of tumours are -

110. ----- is the most feared property of malignant tumours. (NEET)

111. The cancer causing agents are classified as - (3)

112. UV rays are ionising/non-ionising radiation.

113. Ex. of physical agents - (3)

114. Cancer causing viruses are called -----.

115. ----- genes in normal cells when activated cause oncogenic transformation of cells. (NEET)

116. ----- are very useful to detect cancer of the internal organs.

117. CT full form -

118. Computed tomography use X-rays. T/F

119. MRI uses magnetic and ionising/non-ionising radiations.

120. Treatment of cancer is commonly by - (3)



PARTH GOYAL

121. Some side effects of cancer drugs are - (2)

122. As tumor cells are made of our own cells, they are not destroyed by our immune system. T/F

123. _____ activates the immune system and helps in destroying the tumour. (NEET)



• DRUGS AND ALCOHOL ABUSE

124. Commonly abused drugs are - (3) (NEET)

125. Some drugs are obtained from fungi. T/F

126. Opioids binds to specific _____ receptors present in our _____ and _____

127. Heroin is commonly called - (NEET)

128. Heroin chemical name is _____

129. Smack is black/white coloured, aroma/odourless, sweet/bitter crystalline compound.

130. Smack is obtained from acetylation of _____

131. Morphine is extracted from _____ of poppy plant name - (NEET)

132. Heroin is taken by _____ and _____

133. Heroin is stimulant/depressants.

134. Cannabinoid receptors are present in _____

135. Natural cannabinoids are obtained from _____ of the plant _____ (NEET)

136. Ex. of some cannabinoids are - (4)

137. Which parts of cannabis are used to produce cannabinoids ? - (3)

138. They are taken by inhalation and injection. T/F

139. They are taken by - (2)

140. How many C atoms are present in the skeletal structure of a cannabinoid molecule ?

141. _____ are known for their effects on cardiovascular system.

142. _____ has a potent stimulating action on CNS.

143. Coca alkaloid is also called _____ (NEET)

144. It is obtained from plant _____ which is native to country _____ (NEET)

145. Cocaine is commonly called _____ or _____

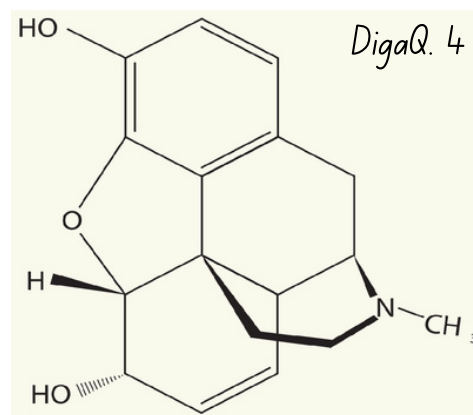
146. Cocaine interfere with the transport of neurotransmitter _____

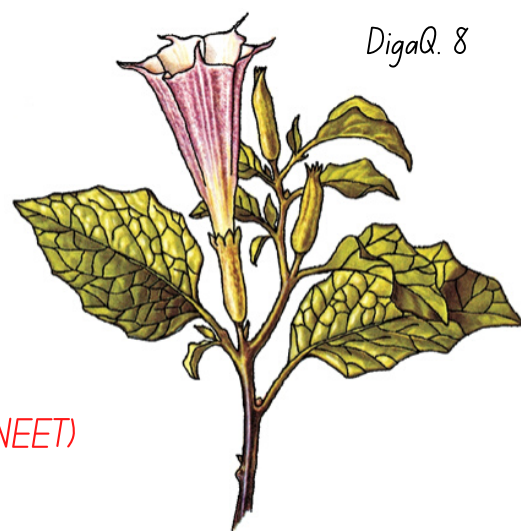
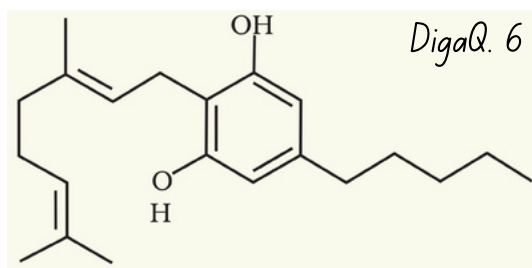
147. Cocaine is usually injected/snorted.

148. Cocaine is a stimulant/depressant and produces a sense of _____

149. Excessive dosage of cocaine causes _____

150. Insomnia is a mental illness. T/F





151. Other plants with well-known hallucinogenic properties are - (2) (NEET)
152. Drugs used as medicines to cope up with mental illness are - (3)
153. _____ is a very effective sedative and painkiller. (NEET)
154. Tobacco is used by humans for more than _____ years.
155. Tobacco contain _____, which is a drug/alkaloid/toxin.
156. Nicotine stimulates _____ glands.
157. Smoking causes an increased incidence urinary bladder cancer. T/F
158. Tobacco chewing is associated with risk of _____
159. Smoking increases _____ content in blood.
160. Define dependence.
161. Those who take drugs intravenously are much more likely to acquire serious infections like - (2)
162. Both AIDS and Hepatitis B infections are chronic infections and ultimately fatal. T/F
163. The chronic use of drugs and alcohol damages _____ and _____ (NEET)
164. Which drugs do sportspersons misuse to enhance their performance? (3)
165. Reduction in size of testicles and decrease sperm count occur in males using anabolic steroids. T/F
166. Side effects of anabolic steroids in females - (8)
167. Side effects of anabolic steroids in males - (10)
168. Premature closure of growth centres occur by using anabolic steroids. T/F



HUMAN HEALTH AND DISEASE



PARTH GOYAL



ANSWERS

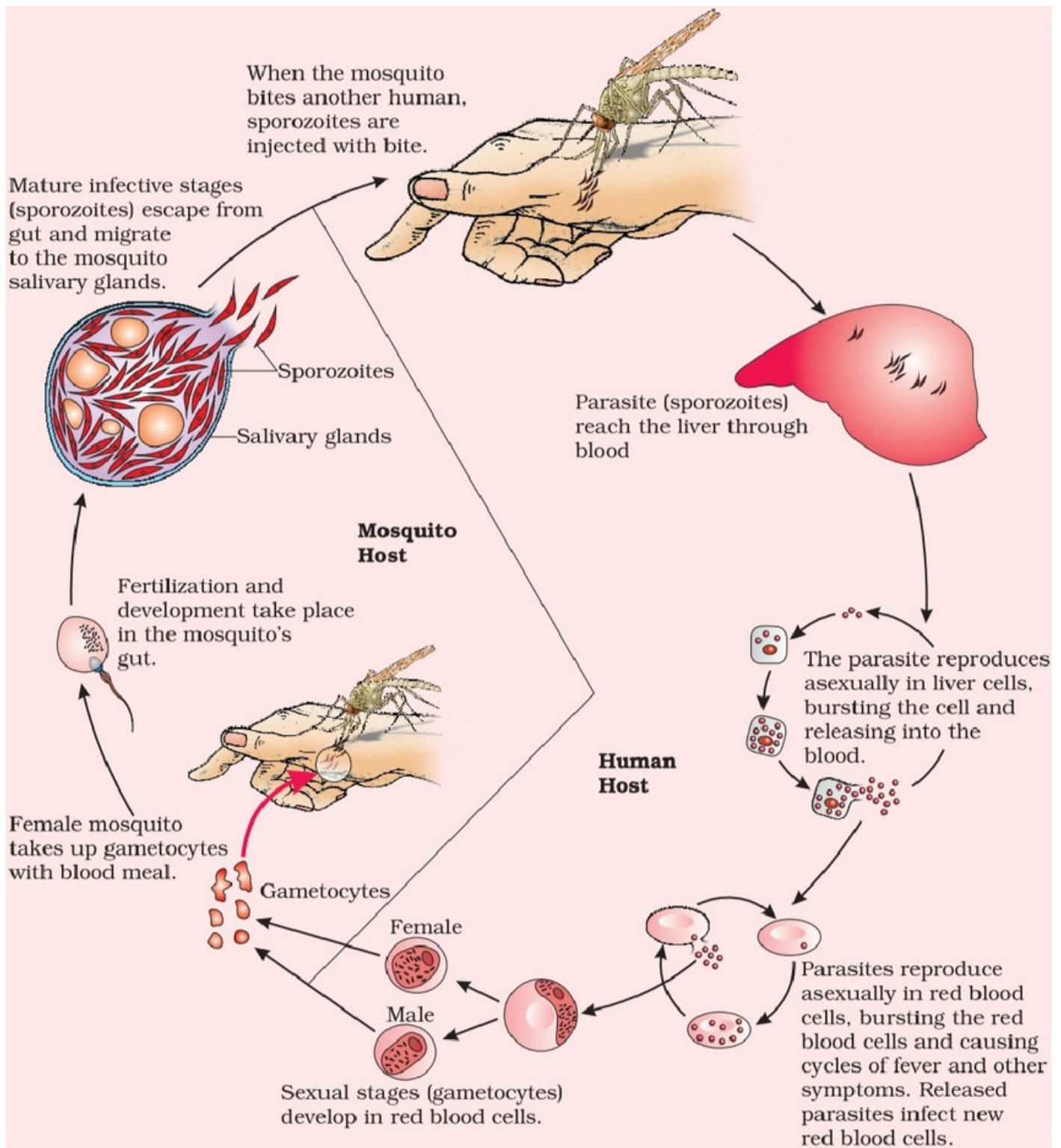
• INTRODUCTION

1. Hippocrates
2. Humors
3. Greeks like Hippocrates and Indian Ayurveda
4. Hot
5. William Harvey
6. William Harvey
7. Genetic disorders, infections, life style
8. State of complete physical, mental and social well-being

9. Infectious and non-infectious

• COMMON DISEASES

10. *Salmonella typhi*
11. Food and water
12. Sustained high fever (39° to 40°C), weakness, stomach pain, constipation, headache and loss of appetite
13. T
14. Widal
15. Mary Mallon, Typhoid Mary



16. *Streptococcus pneumoniae* & *Haemophilus influenzae*
17. T
18. T
19. fever, chills, cough and headache
20. Gray, bluish
21. Bacterial
22. *Yersinia pestis*, *Corynebacterium diphtheriae*
23. Rhino virus
24. F, it don't affect the lungs
25. 3-7
26. F
27. *Plasmodium falciparum*
28. Malignant malaria
29. *P. vivax*, *P. malaria* and *P. falciparum*
30. Sporozoites, female anopheles
31. RBC (refer the diagram)
32. Liver, RBC
33. Haemozoin
34. Haemozoin, 3-4
35. Gut
36. Salivary glands
37. *Entamoeba histolytica*, large
38. Amoebic dysentery, protozoa
39. Symptoms of amoebiasis
 - I. constipation
 - II. abdominal pain and cramps
 - III. stools with excess mucus
 - IV. blood clots
40. Housefly
41. *Ascaris*, *Wuchereria*
42. Ascariasis, Symptoms - internal bleeding, muscular pain, fever, anemia and blockage of the intestinal passage
43. Faeces of infected person which contaminate soil, water, plants
44. *W. bancrofti* and *W. malayi*

45. Elephantiasis or filariasis
46. Genital organs
47. F
48. Slowly
49. *Microsporum*, *Trichophyton* and *Epidermophyton*
50. Ringworm
51. skin, nails and scalp
52. F
53. F
54. Soil, by using towels, clothes, comb of infected individuals
55. *Gambusia*
56. Dengue and chikungunya

• IMMUNITY

57. Physical, physiological, cellular and cytokine barrier
58. Polymorpho-nuclear leukocytes
59. Skin, Mucus coating of the epithelium lining the respiratory, gastrointestinal and urogenital tracts
60. Acid in the stomach, saliva in the mouth, tears from eyes
61. PMNL, monocyte and natural killer, macrophages
62. Interferons
63. Intensified secondary response
64. T
65. H_2L_2
66. IgG, IgA, IgM, IgE, IgD (Mnemonic - GAMED)
67. T lymphocytes
68. CMI
69. Immunosuppressant
70. Natural passive - Colostrum, Placenta | Artificial passive - Anti-tetanus serum, anti-venom after snake bite
71. IgA
72. F



PARTH GOYAL

73. Preformed antibodies against toxins
74. Tetanus
75. Yeast
76. IgE
77. Histamine and serotonin, mast
78. Anti-histamine, adrenaline and steroids
79. Rheumatoid arthritis, hashimoto thyroiditis
80. Bone marrow and thymus
81. Spleen, lymph nodes, tonsils, Peyer's patches of small intestine and appendix
82. 2° lymphoid organs
83. F
84. Bone marrow and thymus
85. Bean
86. Lymphocytes and phagocytes
87. T
88. Erythrocytes
89. Mucosa-associated lymphoid tissue
90. 50

• AIDS

91. Acquired Immuno Deficiency Syndrome
92. Syndrome
93. 1981, 25
94. HIV, retrovirus
95. Transmission of HIV occur through
 - (a) sexual contact with infected person
 - (b) transfusion of contaminated blood and blood products
 - (c) by sharing infected needles as in the case of intravenous drug abusers
 - (d) from infected mother to her child through placenta
96. T
97. F
98. 5-10 years
99. T

100. Macrophage
101. helper-T
102. Protozoa
103. Bacteria
104. ELISA
105. Enzyme Linked Immuno-Sorbent Assay
106. T
107. National AIDS Control Organisation

• CANCER

108. Contact inhibition
109. Benign and malignant
110. Metastasis
111. Physical, chemical or biological agents
112. Non-ionising
113. X-rays, gamma rays and UV rays
114. Oncogenic viruses
115. Protooncogenes
116. X-rays, CT, MRI
117. Computed tomography
118. T
119. Non-ionising
120. surgery, radiation therapy and immunotherapy
121. hair loss, anemia
122. F
123. α -interferon

• DRUGS AND ALCOHOL ABUSE

124. opioids, cannabinoids and coca alkaloids
125. T
126. Opioid receptor, CNS and gastrointestinal tract
127. Smack
128. Diacetyl morphine
129. White, odorless, bitter
130. Morphine



PARTH GOYAL

131. Latex, *Papaver somniferum*
132. Snorting and injection
133. Depressant
134. Brain
135. Inflorescence, *Cannabis sativa*
136. marijuana, hashish, charas and ganja
137. flower tops, leaves & the resin of cannabis plant
138. F
139. Inhalation and oral ingestion
140. 21
141. Cannabinoids
142. Coca alkaloids
143. Cocaine
144. *Erythroxylum coca*, South america
145. Coke or crack
146. Dopamine
147. Snorted
148. Stimulant, euphoria
149. Hallucinations
150. T
151. *Atropa belladonna* and *Datura*
152. barbiturates, amphetamines, benzodiazepines
153. Morphine
154. 400
155. Nicotine, alkaloid
156. Adrenal
157. T
158. Oral cavity cancer
159. CO
160. Dependence is the tendency of the body to manifest a characteristic and unpleasant withdrawal syndrome if regular dose of drugs/alcohol is abruptly discontinued.

161. AIDS and Hepatitis B
162. T
163. Nervous system and liver (cirrhosis)
164. narcotic analgesics, anabolic steroids, diuretics
165. T
166. masculinisation, increased aggressiveness, mood swings, depression, abnormal menstrual cycles, excessive hair growth on the face and body, enlargement of clitoris, deepening of voice.
167. acne, increased aggressiveness, mood swings, depression, reduction of size of the testicles, decreased sperm production, potential for kidney and liver dysfunction, breast enlargement, premature baldness, enlargement of the prostate gland
168. T

• DigaQs

DigaQ. 1 – Elephantiasis/Filariasis
– inflammation in lower limb

DigaQ. 2 – Ringworm infection

DigaQ. 3 – Antibody molecule

A – Antigen binding site

B – Light chain

C – Heavy chain

D – Antigen binding site

E – Light chain

DigaQ. 4 – structure of Morphine

DigaQ. 5 – Opium poppy

DigaQ. 6 – Cannabinoid molecule

DigaQ. 7 – *Cannabis sativa*

DigaQ. 8 – *Datura*



PARTH GOYAL



PARTH GOYAL



SCAN AND DONATE US SO THAT WE
CAN CREATE MORE SUCH QUALITY
CONTENT FOR YOU!

JUST ₹10-20 WILL BE APPRECIABLE! :)

Me: it's just a cough.
Parents: it's just a cough.
The Doctor: it's just a cough.
Google:



PARTH GOYAL